

REMARKS

This Amendment is supplemental to the response filed February 24, 2010, in reply to the Office Action mailed August 25, 2009. Applicants submit that the previous submission was a *bona fide* response to the outstanding Office Action, and Applicants refer the Examiner to the response filed February 24, 2010 for the remarks contained therein with respect to the outstanding Office Action as well as the remarks set forth in the instant Supplemental Amendment. Applicants further submit that entry of this Amendment is appropriate in view of the *bona fide* response previously submitted and to which no response has yet been received.

With this Amendment, Applicants amend claims 8 and 11. Applicants note that the Office has deemed claims 1-7 and 14-22 as being directed to non-elected subject matter and therefore withdrawn these claims from consideration. No new matter has been added with the present Amendment. Support for the Amendment can be found throughout the specification and claims as filed, including, e.g., in original claims 8 and 11, and at pages 11-12 of the specification. Claims 8, 11, 12, and 13 are under consideration with this Amendment.

Claim Rejections – 35 U.S.C. § 112, First Paragraph

The Office Action of August 25, 2009 rejects claims 8-13 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Action states that “the specification discloses a fluorescent protein from *favia favius* such as SEQ ID NO:1, its specific variants such as SEQ ID NO:12, 14, 16, 18 and 20 having mutations at specific positions, and the nucleotide sequences such as SEQ ID NO:2, 13, 15, 17, 19, and 21 that encoding [sic] the fluorescent proteins” (page 5, first full paragraph). However, the Action alleges that the specification “does not disclose a genus of variants for polynucleotides having a

deletion, substitution and/or addition of 1 to 60 nucleotides in the SEQ ID NO:2, 13, 15, 17, 19 or 21 and encoding a fluorescent protein, or polynucleotide fragments of SEQ ID NO:2, 13, 15, 17, 19, or 21.” *Id.* The rejection further alleges that the specification does not provide sufficient guidance as to what structural differences are permissible in the nucleic acid variant that would still produce a functional protein. *Id.*

In response, Applicants submit that the claimed subject matter is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention for at least the reasons set forth in the remarks filed February 24, 2010.

In addition, Applicants wish to emphasize that the specification provides the complete sequence structure for a nucleic acid which encodes a novel fluorescent protein from *favia favius* (specification at page 2, lines 7-17 and SEQ ID NOs: 1-2). Applicants further submit that the specification discloses the complete nucleic acid and amino acid sequence structures for five variants thereof, which variants are also fluorescent proteins (SEQ ID NOs: 12-13, 14-15, 16-17, 18-19, and 20-21). Applicants further submit that the specification describes mutations which may be made at the following twenty positions with respect to amino acid sequence of SEQ ID NO: 1: 10, 12, 40, 54, 60, 62, 63, 69, 70, 87, 93, 109, 119, 121, 140, 144, 160, 196, 197, 198, which mutations would encompass the deletion, substitution, and/or addition, of one to sixty nucleotides.

Based at least on the foregoing, Applicants respectfully submit that the specification describes the claimed subject matter in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed

invention. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections under the written description requirement of 35 U.S.C. §112, first paragraph.


CONCLUSION

In view of the foregoing, and in view of the remarks filed February 24, 2010, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims.

No additional fee is believed due at this time. If, however, any additional fee is necessary to ensure consideration of the submitted materials, the Patent and Trademark Office is hereby authorized to charge the same to Deposit Account No. 19-0089.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed telephone number.

Respectfully Submitted,
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